ABSTRACT

A machine for injecting liquids. An air booster pump is adapted to receive injectate. The air booster pump is in fluid communication with one or more heads having apertures for nozzles. A hollow tube is preferably, but not necessarily, located within each head and is in fluid communication with the air booster pump. Injectate flows from the air booster pump into the head, preferably through the apertures in the wall of the hollow tube. Preferably, but not necessarily, the head is designed so that upon installation one point of the inside of the head will be at the highest elevation. Near such point the head has an escape aperture so that any gas within the injectate that enters the head will tend to flow to and through such escape aperture. Furthermore, a return line preferably, but not necessarily, takes injectate that flows through the escape aperture to the low-pressure side of the air booster pump. And also, a drain, in a work surface to which the head is preferably, but not necessarily, mounted, preferably, but not necessarily, reclaims injectate and transports it to the low-pressure side of the air booster pump. Filters exist for the injectate; a main injectate filter can preferably be replaced while the Machine is operating. And the Machine preferably includes a computer device for controlling its components and operation.